National Aeronautics and Space Administration
Goddard Space Flight Center

Inside Wallops

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NASA Wallops Flight Facility to Launch Student Balloons

NASA Goddard Space Flight Center's Wallops Flight Facility and college students from Virginia and New Jersey will join forces during the week of Aug. 10 to launch two scientific balloons carrying atmospheric measurement experiments designed and built by the students.

The payloads are part of the NASA Student Balloon Program which provides students the opportunity to develop balloon launched experiments that will produce valid scientific results. The students are responsible for all technical and managerial aspects of the project.

Experiments are being conducted by undergraduate and graduate students from the New Jersey Institute of Technology (NJIT) and four of the member institutions of the Virginia Space Grant College Consortium. The Virginia students are from Old Dominion University, the College of William and Mary, Hampton University and Tidewater Community College, all of which are located in Southeastern Virginia. The first of the two scientific balloons and experiments is currently scheduled for launch from the Wallops Flight Facility during the early morning of Aug. 11.

The flight for the Virginia students will last from three to four hours and reach a maximum height of 90,000 feet (17 miles). An onboard imaging experiment will provide high resolution digital photos of the flight. These images may be viewed real-time on the Internet at: **http://ixeab2.larc.nasa.gov/~killough/vsgc.**

The 100-pound payload includes the gondola, which houses the experiments as well as support systems. In addition to the onboard imaging experiment is a high altitude air sampling experiment that will collect eight samples taken from 65,600 feet to 71,350 feet. There also will be two Global Positioning System (GPS) experiments.

The NJIT payload is a Multi-Altitude Air Collection System (MAACS). MAACS, a two year project, was designed and constructed by a team of undergraduate students and will take air samples as the balloon rises to an altitude of approximately 90,000 feet.

Housed within an aluminum gondola, the testing equipment includes sensitive electronic and timing equipment which must withstand a wide range of temperature and air pressure changes. The equipment will rely on a GPS receiver to determine altitude and triger the opening of a series of collection tubes.

"We hope to collect air samples to measure concentrations of various pollutants in the air at different altitudes, " said Dr. Bruce Bukiet, associate professor of mathematical sciences at NJIT who is the project principal investigator.

Once each balloon has reached altitude and completed the desired flight duration, NASA operations personnel will send an electronic signal to the balloon to terminate the flight. A small tear will develop in the balloon material and cause it to fall to the ground. An onboard parachute will deploy allowing the gondola and experiments to descend. The students will then be able to retrieve their experiments and do post-flight evaluations.

In late August, students from Prairie View (Texas) A&M University, will be participating in the program and will conduct their balloon launch from the National Scientific Balloon Facility, Palestine, Texas.

More information on the NASA Student Launch Program and Scientific Balloon Program may be obtained by visiting the Wallops homepage: **http://www.wff.nasa.gov**

Students Spend Summer Vacation Working At NASA Wallops Flight Facility

Students in the 1998 Summer High School Apprenticeship Research Program (SHARP) and the Space Club Scholar Program have spent their summer vacations working in various locations at Wallops.

Bottom row left to right: Robert Blessing, Julian Avila, Andrew O'Brien and Arthur Morrison. Top row left to right: Michael Cropper, Scott Heatwole, Carlton West, Candace Snow and Nicholas Holden. Photo by Tom Burton.

Students in the National Space Club Scholars Program spend six weeks, and SHARP students spend eight weeks with a scientist or engineer. Students are selected on a competitive basis for placement. Once selected, they are assigned to work with a mentor in a specific area of science or technology.

Both programs offer an intensive science and engineering apprenticeship and are designed to increase, strengthen and diversify the pool of students for mathematics, science and engineering college majors and careers. During the apprenticeship, students have the opportunity to conduct meaningful research and participate in a variety of educational and professional activities.

The SHARP students include Nicholas Holden, Arthur Morrison, Candace Snow and Carlton West. Returning for the second year as a Space Club Scholar is Micheal Cropper. Other Space Club Scholars are Julian Avila, Robert Blessing, Scott Heatwole, and Andrew O'Brien.

The Public Affairs Office would like to thank everyone who supported these two programs this year.

Center Director Al Diaz Announces Appointments

Center Director, Al Diaz announced recently that Rick Obenschain (ESDIS Project) has agreed to become the first Center Chief of the Electrical Systems Center (Code 560) in the AETD.

Diaz has assigned Dorothy (Dolly) Perkins, currently the Deputy Director of AET, as Deputy Associate Director of Flight Projects for EOS Operations. She will work with Chris Scolese, the Associate Director of Flight Projects for EOS, to manage the entire scope of the EOS program activity at the Center.

Nationsbank Is Next Credit Card Provider

NASA has selected Nationsbank, Charlotte, NC to be its next credit card provider for fleet, travel and purchase cards. Nationsbank is one of six banks awarded master contracts by the General Services Administration (GSA). NASA will issue a task order agreement for all three card types through GSA, to be effective Nov. 30, 1998, for up to ten years, including options.

NASA spends approximately $100 million per year through credit card services. This no-cost agreement with Nationsbank for all three card types will allow NASA to pursue integrated services that will streamline processes and gain efficiencies.

NASA currently uses three different GSA card providers: American Express for travel cards, Rocky Mountain Bank for purchase cards, and Wright Express for fleet cards. The existing card agreements expire on November 29, 1998.

Commonwealth Graduate Engineering Program

The 1998 fall semester of the Commonwealth Graduate Engineering Program will begin Aug. 29 at the Old Dominion University (ODU), Sept. 2 at the University of Virginia (UVA), Aug. 31 at the Virginia Polytechnic Institute and State University (VPI).

Through this program, scientists, engineers and certain technicians can take graduate engineering courses on-site at Wallops leading to a master of science (VPI), master of engineering (UVA), or master of engineering management (ODU) degree. Classes are conducted by an interactive telecommunication system that provides two-way voice communication and live television instruction from the appropriate universities broadcast studios.

Students interested in participating must first apply for admission to ODU, UVA or VPI. Application forms may be obtained by calling the Commonwealth University Program Office at (757) 683-3787 and requesting the specific program application.

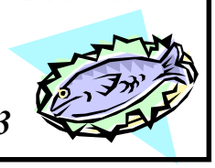
Call Sherry Kleckner for the 1998 fall semester course schedule and tuition fees for all schools.

Employees who are accepted for admission by the universities should complete a Request for Training form and Purchase Order and route it through your management and training coordinator to Nichole Richmond, Code 114 by Aug. 21, 1998. If you have any further questions about the program, contact Nichole on x66-5757.

The Space Experiment Module-07 undergoes final integration at Wallops. Chalie Lipsett (Code 546) (right), and Kathy Dankewicz and Bill Seidel (Swale Aerospace) install one of the 10 canisters on the SEM. The module, scheduled for flight on STS-88 in December 1998, is the first SEM to be fully integrated at Wallops.

Fish Fry
All-You-Can-Eat

August 14
4:30 p.m.
Building F-3



Early Retirement Authority Expires

NASA's voluntary early retirement authority expires Sept. 30, 1998. The early out authority permits eligible employees to retire at age 50 with 20 years of creditable Federal service or 25 years of creditable Federal Service, regardless of age. Many of the NASA Centers, including Goddard, have been successful in their downsizing efforts, and OPM has indicated it will **not** approve early retirement extensions for Centers whose downsizing is complete. Therefore, Goddard's early out authority will not be extended past the Sept. 30 date. The Office of Personnel Management has extended the voluntary early out authority through Sept. 30 for KSC, MSFC, JSC and Code M at Headquarters.

The early out window for the Goddard Space Flight Center will expire on Sept. 30, 1998. Any employee hoping to take advantage of the opportunity to retire under the early retirement authority must be off the Center's rolls by that date.

If you have any questions, please contact Lisa Johnson, x1151.

Back To School Shopping Trip to Jamaica, NY

Saturday, Aug. 22, 1998

Tentative Bus Departure Points*
Four Corners Plaza, Onley
Arcadia High School
Roses Plaza, Pocomoke
Salisbury Giant Plaza

*Subject to change as needed.

Tickets: $35 - must be purchased by August 14

Contact: Sandra Banks @ x2526, Rebecca Beach @ x1559 or Lisa Johnson @ x 1151

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